

### AMENDMENTS TO THE SPECIFICATION

The following is a marked up version of each replacement paragraph and/or section of the specification in which underlines indicate insertions and strikethroughs indicate deletions.

Please replace the paragraph on page 16, containing lines 6-17 with the following paragraph:

C | For any node  $v$  (e.g.,  $S1$ ),  $\text{net-transition-tree}(v)$  stores all acyclic paths from  $v$  to other vertices in its SCC. The tree has  $v$  as its root, and its height is equal to the number of nodes in the SCC containing  $v$ . Children of  $v$  are all the nodes in its SCC that have a direct edge from  $v$ . In general, the children of any node  $[[\mu]] \underline{u}$  (e.g.,  $S1-S7$ ) are all the nodes in its SCC that have a direct edge from node  $[[\mu]] \underline{u}$ . Note that a node may appear multiple times in this tree. That is, each node has a label where the labels are not necessarily unique. The root node has label  $v$ . A node labeled  $[[\mu]] \underline{u}$  has as many children as the outdegree of  $u$  (number of edges leaving  $u$ ) in its SCC, and these children are labeled with the corresponding nodes in the SCC.